April 28, 1953 S. C. BRODY 2,636,702

PICTURE FRAME AND SUPPORT

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Fig. 1.

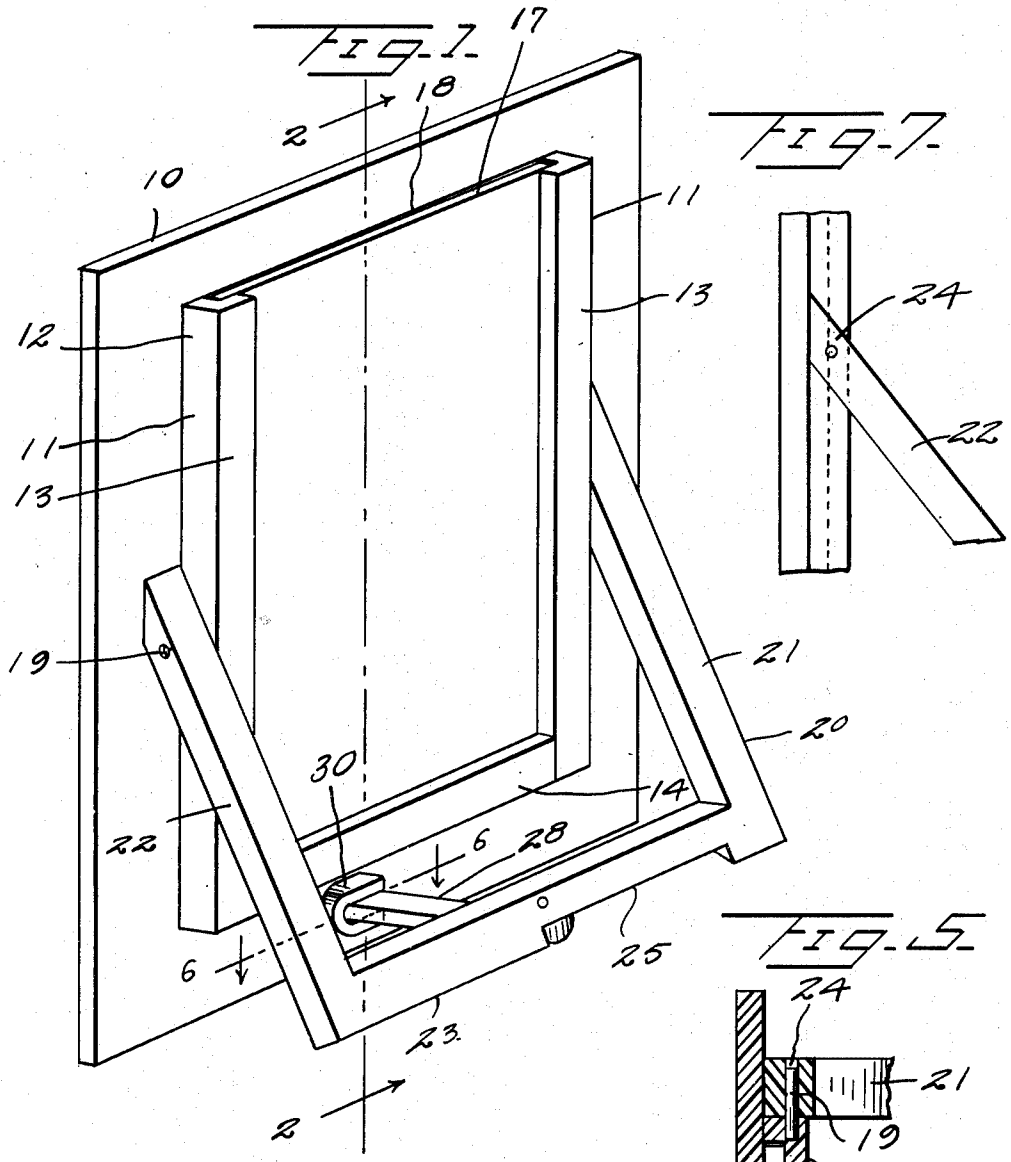
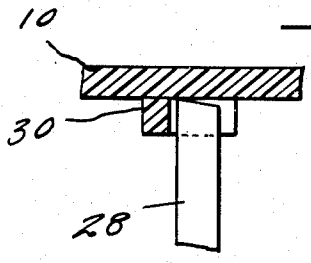


Fig. 7.

Fig. 5.

Fig. 6.



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Fig. 2.

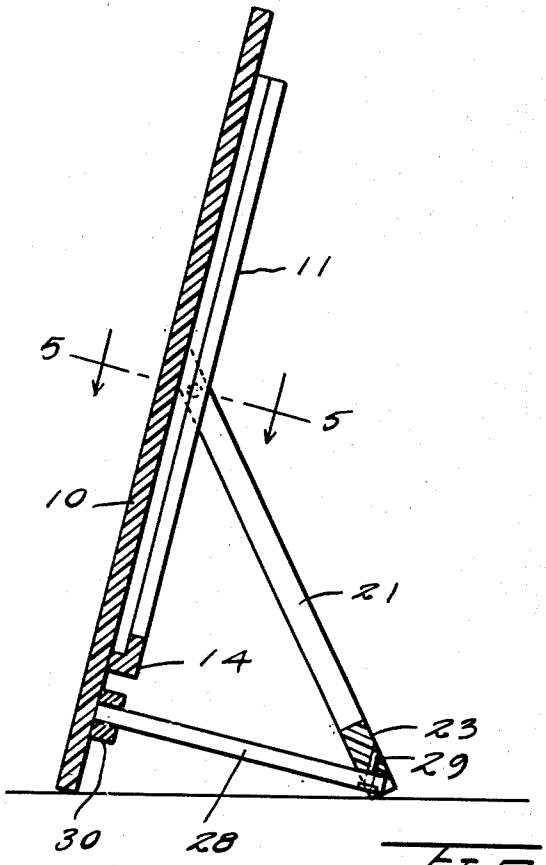


Fig. 3.

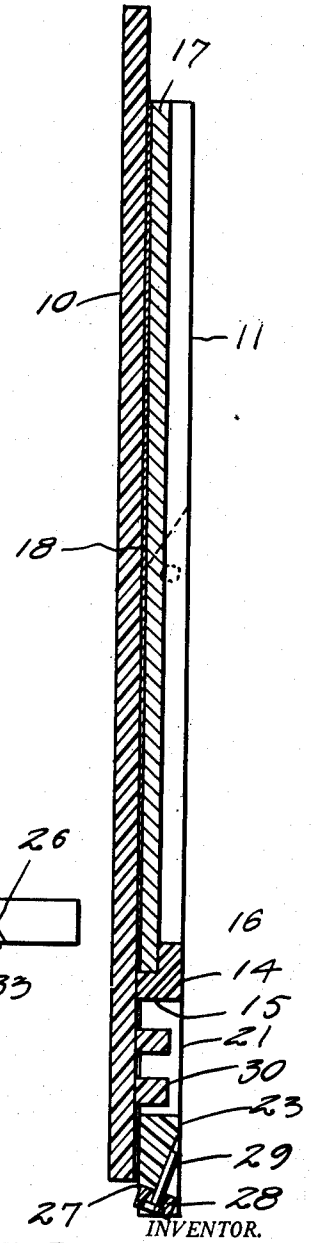


Fig. 4.

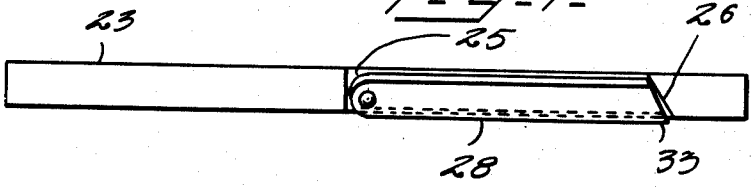
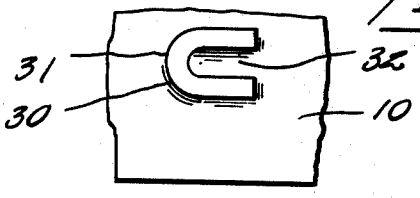


Fig. 8.



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Fig. 9.

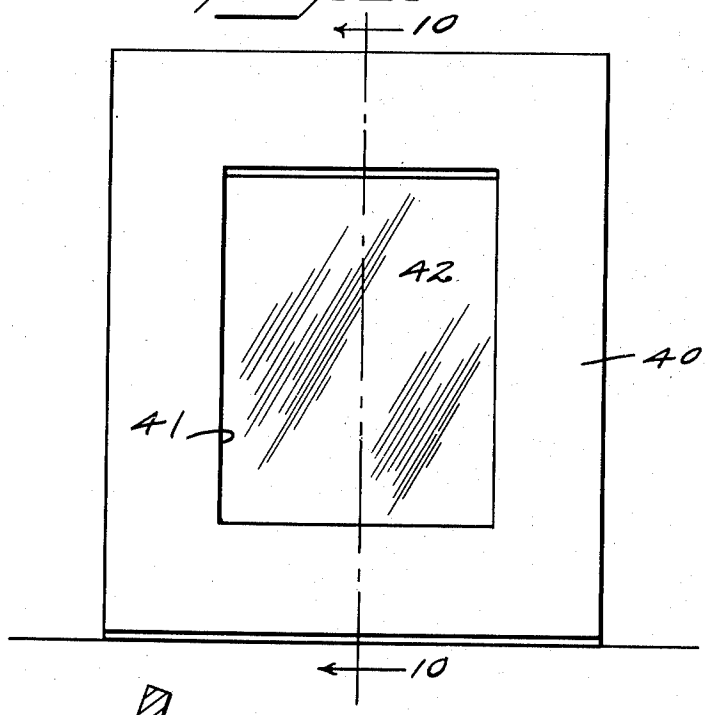


Fig. 10.

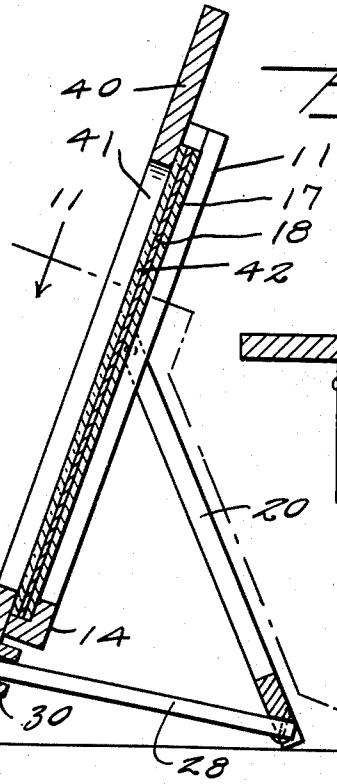
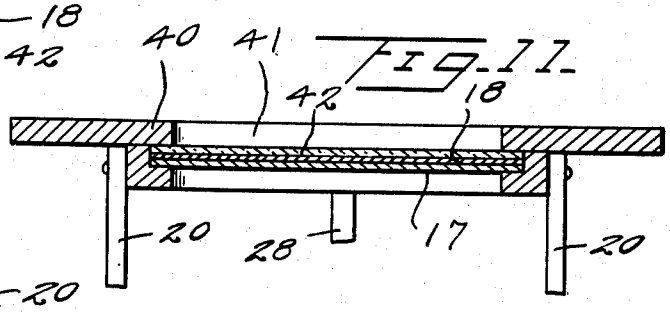


Fig. 11.



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PICTURE FRAME AND SUPPORT

Samuel C. Brody, Cambridge, Mass.

Application April 29, 1949, Serial No. 90,390

4 Claims. (Cl. 248—37)

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This invention relates generally to picture frames and supports therefor, and preferably to such frames and supports constructed from plastic or like moldable material.

An object of this invention is to provide a picture frame and a rigid support for holding the frame in a substantially vertical position when resting on a horizontal surface.

A further object of this invention is to provide a picture frame and support therefor in which the latter may be detached from the frame, positioned flush with the back surface of the frame, or swung rearwardly into frame supporting position.

An additional feature of this invention is the provision of a picture frame support which may be locked securely in frame supporting position and which is constructed so as to be readily fashioned out of plastic material.

A still further object of this invention is to provide a picture frame and support therefor, embodying all of the above stated advantages and features and which may be inexpensively manufactured and sold.

To the end of obtaining a picture frame and support therefor fulfilling the foregoing objects and others which may hereinafter more fully appear, the invention consists of the novel construction, combination and arrangement of parts, as will be more specifically referred to and illustrated in the accompanying drawings, but it is understood that changes, variations, and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawings,

Figure 1 is a perspective view of a picture frame and support therefor constructed according to an embodiment of my invention,

Figure 2 is a vertical sectional view of the picture frame and support taken on the line 2—2 of Figure 1,

Figure 3 is a vertical sectional view similar to that in Figure 2 but showing the support folded or collapsed against the rear surface of the picture frame,

Figure 4 is a bottom plan view of the support for the picture frame,

Figure 5 is a detail sectional view taken on the line 5—5 of Figure 2, and showing the details of the support hinge,

Figure 6 is a fragmentary sectional view taken on the line 6—6 of Figure 1,

Figure 7 is a fragmentary side elevation of the picture frame and support illustrating the relationship therebetween hereinafter more fully described,

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Figure 8 is a fragmentary rear elevation view of a part of the lower portion of the picture frame showing details of construction more fully described in the following,

Figure 9 is a front elevation of a modification of the picture frame and support therefor illustrated in Figure 1,

Figure 10 is an end view in section of the picture frame and support therefor shown in Figure 9 and taken on the line 10—10 of Figure 9, and

Figure 11 is a transverse section taken on the line 11—11 of Figure 10.

Referring to Figure 1 of the drawings, the picture frame and support therefor constructed according to an embodiment of this invention is illustrated. The picture frame itself consists of a plate or sheet 10. The plate or sheet 10 is shown to have a rectangular shape, however, it may be formed in any particular shape desired such as oval or circular or the like. The central portion of the plate 10 is transparent so that an illustration or picture mounted therebehind may be viewed through the plate, and may be tinted or colored as desired to impart color to the illustration, or it may be cut-out as in the embodiment of Figure 9 hereinafter described. The outer portions of the plate may be opaque, colored, or contain a fanciful design etched therein. A material such as "Plexiglas" or the like has been found to be ideally suited for the construction of the plate 10 since in its polished condition it is transparent but may be easily colored or etched and withstands shocks or blows without breaking. Secured to the rear surface of face of the frame 10 are a pair of vertically extending angle members 11. The angle members 11 are secured to the rear face of the frame 10 with one leg 12 thereof either integral with or fixedly secured to the frame 10. The other leg 13 of the angle 11 is directed inwardly towards the center line of the frame 10.

Adjacent to the bottom ends of the vertically extending angles 11, a horizontally extending angle 14 is similarly secured to the rear face of the frame 10. The angle 14 extends between the inwardly directed legs 13 of the angles 11 and has one leg 15 secured to the frame and the other leg 16 extending upwardly.

A picture backing plate 17 is slid into the recess formed by the legs 13 and 16 of the angles 11 and 14, with the picture or other material to be displayed 18, disposed on the forward face thereof facing forwardly. Approximately midway along the length of the legs 12 of the angles

11 a pin 19 extending outwardly from the legs 11, is embedded in the angle. The pin 19 is spaced rearwardly from the rear face of the rectangular frame member 10 as best seen in Figure 5.

A U-shaped supporting member 20 having vertically extending legs 21 and 22, and a horizontally extending cross member 23 is pivotally and removably carried by the embedded pins 19. The supporting member 20, as are all of the other structural members of the picture frame and support may be formed of a plastic material or any other material having an inherent resiliency, and therefore the legs 21 and 22 may be sprung apart for the purpose of engaging and disengaging the pivot pins 19.

The construction of the uppermost ends of the vertically extending legs 21 and 22 is best seen in Figure 7. It will be noted there that the top end is cut on a downwardly and forwardly extending angle. The hole 24 adjacent the uppermost end of the legs 21 and 22 is spaced downwardly therefrom so that the angled upper end of the leg will serve as a limit stop when the support 20 is swung rearwardly to its supporting position. The bottom or cross member 23 of the support is formed with a longitudinally extending cut-out 25, along the lower bottom edge thereof. The cut-out 25, extends from substantially the center line of the cross member 23 to a point close to one of the legs 21 or 22.

As seen in Figure 4, the outer edge 26 of the cut-out 25 is cut on a forwardly and outwardly disposed angle. Similarly the roof of the cut-out 25 indicated by the reference numeral 27 in Figure 3, is disposed on a forwardly and upwardly plane.

A locking bar 28 is pivotally carried by the pin 29 which is embedded in the cross member 23 at right angles to the roof 27 of the cut-out 25. As will be seen in Figure 2, because of this angle between the pivot pin and the cross beam 23, the locking rod 28 when pivoted forwardly will be disposed substantially at right angles to the frame 10.

A U-shaped latching member 30 is secured adjacent the bottom edge of the frame 10 on the rear surface thereof. The latching member 30 is disposed with the bight portion 31 facing in the direction opposite to the cut-out 25, that is, the open end 32 of the U-shaped member is disposed towards the same end of the cross member 23 as contains the cut-out 25 and can receive the locking bar 28 when it is pivoted forwardly for the purpose of positioning the support member 20.

As can be seen from Figure 4, the free end 33 of the locking bar 28 is also formed with a forwardly and outwardly inclined outer edge. However, this inclination is not as great as that of the outer edge 26 of the cut-out 25. Therefore, when the locking bar 28 is pivoted to a position substantially flush with the cross member 23, a wedging action will be obtained between the locking bar 28 and the outer edge 26 of the cut-out 25 for the purpose of frictionally maintaining the locking bar in that position.

Referring to Figure 2 once more, it will be noted that the length of the locking bar 28 is such that when it is swung forwardly to be received by the member 30 there will be simultaneous bearing between the end 33 of the locking bar and the back surface of the frame 10 and between the inclined uppermost end of the legs 21 and 22 and the back surface of the frame 10. This will have the effect of frictionally maintaining the locking bar 28 in position within the U-shaped member 30, thereby providing a rigid and sturdy support for the picture frame.

When it is desired to support the picture frame on a wall bracket in a conventional manner, the supporting member 20 can be folded flush with the rear surface of the frame 10 by swinging the locking bar 28 into the recess 25, as seen in Figure 4, and by folding the supporting member 20 flush with the rear surface of the frame 10 as seen in Figure 3, or if desired the entire supporting member 20 can be removed from the frame simply by springing the legs 21 and 22 outwardly so as to disengage the upper ends of the legs 21 and 22 from the pivot pins 19. In Figures 9, 10 and 11 of the drawings I have illustrated a modification of my invention which includes a changed construction for the frame. Referring to Figure 9, I have shown a picture frame, or the like, indicated by the reference numeral 40, which is formed with a central cut-out 41. The frame 40 is shown as being rectangular in shape, but it is to be understood that it may have any desired planform, such as, an oval or circle. The frame 40 may be formed of a transparent or opaque material and may be colored or embellished with any design or ornamentation. As in the embodiment of my invention illustrated in Figures 1 through 8, a pair of vertically extending angle members 11 are secured to the rear surface of the frame 40 adjacent to the side edges of the opening 41, and a horizontally extending angle 14 is secured to the rear surface of the frame 40 adjacent to the bottom edge of the opening 41. The construction of the supporting member 20 and the details of the locking bar 28 and the latching member 30 and the operation thereof are identical with that described above in connection with the first mentioned embodiment of my invention. In addition to the picture backing plate 17 and the picture or illustration 18, I also mount a transparent covering or protective plate 42 in front of the picture or illustration 18. This protective plate 42, the picture 18 and the backing plate 17 are all slidably received by the recess formed by the legs 13 and 16 of the angles 11 and 14 respectively, and the rear surface of the frame 40, thus enabling the picture or illustration 18 to be viewed through the opening 41 and the plate 42. The plate 42 may be tinted or colored as desired to impart an attractive color to the illustration 18 supported therebehind.

From the foregoing it can be seen that I have devised a picture frame having a sturdy support when it is desired to support the frame upon a horizontal surface and also that the frame and support is adaptable to hanging upon a wall or the like with a minimum of effort in modifying the frame for that purpose.

What I claim is:

1. Supporting means for a picture frame comprising a supporting member pivotally carried by the rear of the frame, said supporting member including a pair of spaced apart upwardly extending legs, a cross member connecting the lower portions of said legs, means on said legs for limiting the outward pivoting of said supporting member relative to the frame, a recess formed in said cross member having a forwardly beveled outer end, a locking bar pivotally connected at one end thereof to the inner end of said recess, the other end of said locking bar being formed with a rearward bevel, latching means on the rear surface of

the frame for engaging said locking bar in the forwardly extending position thereof, whereby said locking bar in one position thereof will engage said latching means for spacing said supporting member from the frame and in another position thereof will be disposed in said recess, the forwardly beveled end of said recess clampingly engaging the rearwardly beveled outer end of said bar for retaining said bar in said second position.

2. Supporting means for a picture frame comprising a pair of outwardly extending pivot pins fixedly carried by the frame and spaced rearwardly therefrom, a support member including a pair of spaced apart vertical legs formed with mounting holes spaced downwardly from the upper ends thereof for pivotal and releasable engagement with said pivot pins, a cross member connecting the lower ends of said vertical legs and formed with a recess in the bottom edge thereof extending from substantially the center thereof to adjacent one end, said recess having a forwardly and upwardly inclined top surface and a forwardly and outwardly bevelled outer end, a bar substantially the length of said recess pivotally carried at one end thereof by the inner end of said recess for rotation in a plane parallel to that of said top surface of said recess and formed with a forwardly and outwardly bevelled free end, a sidewardly disposed U-shaped latching member mounted on said frame member for releasably receiving said free end to limit the rotation of said bar, whereby said bar when engaging said latching means will dispose the bottom end of said support member rearwardly in picture frame supporting position with portions of said legs extending above said mounting holes engaging the rear surface of said frame member to limit further rearward swinging of said support member; and whereby said bar when rotated into alignment with said cross member will be disposed within said recess with said recess outer end engaging said bar free end for retaining said bar in said recess.

3. A support assembly for a picture frame comprising a pair of spaced apart vertical members of angular cross section attached to the rear face of the frame, a pair of pivot pins fixed to and projecting laterally of said vertical members and spaced from the rear surface of the frame, a support member including a pair of substantially parallel legs rockably mounted on said pins at points intermediate the lengths of said legs so that end portions of said legs extending beyond

said pins are engageable with the rear of the frame to limit the rearward swinging of the opposite end portions of the legs, a cross-member connecting said opposite end portions of said legs, and a swingable locking bar carried by said cross-member and engageable in one position with the rear surface of the frame to rearwardly space said opposite end portions of said legs a distance from the rear surface of the frame as determined by the limiting end portions of said legs.

4. Supporting means for a picture frame comprising a pair of transversely spaced vertically extending members fixed to the rear face of the frame, each of said vertical members being of angular formation in horizontal cross section, a pair of coaxially disposed pivot pins attached to and projecting outwardly of the respective vertical angle members and spaced rearwardly from the rear surface of the frame, a pair of substantially parallel legs formed with forwardly beveled upper ends, mounting holes in said legs spaced from said upper ends of the latter for receiving said pivot pins so that said beveled upper ends are engageable against the rear surface of the frame to limit the rearward swinging of the lower portions of said legs, a cross-member connecting the lower portions of said legs, a swingable locking bar pivotally carried at one end on said cross-member and engageable in one pivoted position against the rear surface of the frame to space said lower portions of the legs from the frame a distance sufficient to engage said beveled upper ends against the frame, and latch means on the rear surface of the frame for preventing pivoting of said locking bar beyond said one position.

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